This two-day course introduces participants to the operating principles of air compressors, their construction and classification, auxiliary components, and maintenance requirements.

I. Principles of Operation
   A. Gas Laws
   B. Volume–Pressure Relationship
   C. Volume–Temperature Relationship

II. Compressors Construction and Classification
   A. Single Acting/Double Acting
   B. Single Multi-Staged
   C. Dynamic
   D. Axial
   E. Centrifugal

III. Rotary Compressors
   A. Positive Displacement Rotary
   B. Sliding Vane Rotary
   C. Lobe Rotary
   D. Liquid Ring Rotary

IV. Reciprocating Compressors
   A. Compression Cycles
   B. Compressor Components
   C. Compressing Element
   D. Lubrication System
   E. Cooling System
   F. Control System
   G. Unloaders/Unloading Valves

V. Compressor Auxiliaries
   A. Silencers
   B. Traps
   C. Receivers
   D. Moisture Separators, Dryers and Filters
   E. Safety Features

VI. Compressor Maintenance
   A. Preventive Maintenance
   B. Corrective Maintenance
   C. Troubleshooting Guide